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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
Davis et al

Application No.: 09/697,009

Filed: October 25, 2000

For: DIGITALLY MARKED OBJECTS AND PROMOTIONAL METHODS

Examiner: J. Janvier

Date: March 14, 2006

Art Unit 3622

Confirmation No. 4530

CERTIFICATE OF MAILING

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SUBSTITUTE APPEAL BRIEF (SECOND)[1]

Sir:

This brief is in furtherance of the Notice of Appeal filed May 5, 2005, and further to the Notification of Non-Compliant Appeal Brief mailed December 22, 2005. Please charge the fee required under 37 CFR 1.17(f), and the required extension of time, to deposit account 50-1071 (see transmittal letter).

[1] A first Appeal Brief was filed May 24, 2004, in response to which the Office re-opened prosecution.

I. REAL PARTY IN INTEREST

The real party in interest is Digimarc Corporation, by an assignment from the inventors recorded at Reel 11619, Frames 667-68, on March 2, 2001.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

Claims 2 and 5-7 stand finally rejected and are appealed.

IV. STATUS OF AMENDMENTS

The Office declined to enter an Amendment After Final to claim 2, alleging that it raised new issues.

That amendment inserted language to redress the Office's objection to claim 2, noted in its January 31, 2005 Action (page 4). In that Action the Examiner stated "Appropriate correction is required." However, when Appellants made the requested correction, entry of the correction was refused.

Additionally, the Office has failed to return to the undersigned an initialed copy of the Form PTO-1449 listing non-patent literature submitted on September 15, 2003, in accordance with Rule 98(d). Consideration of such art, and return of the initialed Form PTO-1449 listing such art, is requested.[2]

Finally, by way of explanation concerning claim status (and not an issue for consideration by the Board), the Examiner made a restriction requirement in the May, 2003, Action. That restriction requirement has not yet been made final. Because Appellants may be prejudiced by

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[2] The Examiner explained that the priority case in which such art is filed was handled by an Examiner who

cancelling claims not "finally" restricted, those claims are still in the case (withdrawn from consideration).

V. SUMMARY OF CLAIMED SUBJECT MATTER

Appellants' claimed invention concerns context-dependent responses to the detection of digitally watermarked objects.

Digital watermarking is the science of hiding secret information – often in some other data, and without leaving any apparent evidence of data alteration.[3]

Digital watermarking can take many forms - several are detailed in patent documents incorporated-by-reference in the present specification.[4] One form of digital watermarking favored by the present Appellants involves making subtle changes to the luminance of pixels comprising printed artwork (e.g., as may be found on a paper coffee cup or coffee cup jacket[5]) to thereby encode a hidden multi-bit digital data payload. The changes are too slight to be perceptible to human viewers of the indicia. But when such watermark-encoded printed artwork is sensed by a web-cam or the like, and computer analyzed, the encoded digital data can be recovered and a corresponding action can be triggered thereby.

In an illustrative embodiment, a coffee shop distributes coffee in cups (or jacketed cups) that are digitally watermarked to convey digital data.[6] The shop is equipped with a reader terminal to which the cup can be presented.[7] (The reader terminal may be positioned at the condiments counter having cream, sugar, etc., and may be arranged to encourage the consumer to place the cup at a location that is optimized for sensing the digital watermark from the cup, e.g., with a fixed web cam that is part of the terminal.[8])

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has left the Office. However, there is no suggestion that the file is unavailable from storage.

[3] Digital watermarking is a well developed art that is not belabored in the present specification. Instead, the present specification incorporates-by-reference earlier patents and applications on the subject, as detailed in fn. 4.

[4] *See, e.g.*, specification, page 1, lines 4-5 and 29-31; and the incorporation by reference language found at page 5, lines 5-6.

[5] *See, e.g.*, specification, page 2, lines 1-2.

[6] *See, e.g.*, specification, page 2, lines 16-17.

[7] *See, e.g.*, specification, page 2, lines 17-18.

[8] *See, e.g.*, specification, page 2, lines 18-20.

When the digital data is sensed from the coffee cup, an associated computer system uses this data as an index to a database, which specifies a corresponding response.[9] The response may, for example, be printing a coupon.[10] Thus, by placing the coffee cup within view of the terminal, the customer is issued a coupon.[11]

The particular arrangement defined in the appealed claims specifies that different reader devices respond differently to the same digitally watermarked object.[12] Continuing the coffee cup example, a reader terminal at the coffee shop may respond to presentation of the digitally watermarked coffee cup by issuing a coupon for a free daily newspaper.[13] If the customer walks down the street and presents the same coffee cup to a reader device at a neighboring bagel shop, the terminal in that store may respond by issuing a coupon for a free cream cheese spread on a purchased bagel.[14]

Thus, according to independent claim 2, the method sought to be patented comprises:

> presenting a digitally watermarked object to a reader device at a first location, and triggering a first response thereby;[15]
>
> presenting the object to a reader device at a second location, and triggering a second, different, response thereby;[16]
>
> wherein at least one of said responses comprises the issuance of a coupon.[17]

According to independent claim 5, the method sought to be patented comprises:

> presenting a digitally watermarked object to a reader device at a first location, decoding information from the watermark, and triggering a first response

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9 *See, e.g.*, specification, page 2, lines 21-24.

10 *See, e.g.*, specification, page 2, line 26.

11 *See, e.g.*, specification, page 3, lines 2-3.

12 Claim 2.

13 *See, e.g.*, specification, page 3, lines 14-21.

14 *See, e.g.*, specification, page 3, lines 21-22.

15 *See, e.g.*, specification, page 2, lines 16-26, wherein the object is a coffee cup, and the first location is at a coffee shop. Encoding of the digital object identifier as a digital watermark finds support, e.g., at page 1, lines 13-17.

16 *See, e.g.*, citations in fn. 15, and also page 3, lines 14-22 wherein the second location is a bagel shop down the street.

17 *See, e.g.*, specification, page 2, line 26.

thereto;[18] and

presenting the object to a reader device at a second location, decoding information from the watermark, and triggering a second, different, response thereto.[19]

A great variety of different implementations of the claimed arrangement can be made. For example, prizes may be awarded upon visiting a specified circuit of locations. Showing a coffee cup to each of the Starbucks stores in a city may result in the award of a $20 gift certificate when the last one is visited.[20]

The coffee cup is but one example of an object that can be digitally watermarked. Essentially any object can be so marked, including clothing – such as a t-shirt.[21] Thus, a Habitat for Humanity t-shirt may be encoded with digital data. If a person wearing it is sensed by a terminal at Starbucks, a first type of premium may be issued. If the person wears the same t-shirt to Mrs. Fields' Cookies, a second type of premium may be awarded.[22]

Additional information is provided in the Detailed Description, which is only four pages long and can be read quickly.

VI. GROUNDS OF REJECTION

Claim 2 stands rejected under § 102 over Lemon (4,674,041).

Claims 2 and 5-7 stand rejected under § 103 over Lemon (taken in context with asserted "Official Notice").

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[18] *See, e.g.*, citations in fn. 15. Decoding information from the watermark finds support, e.g., at page 1, lines 19-21.

[19] *See, e.g.*, citations in fn.18, and also page 3, lines 14-22 wherein the second location is a bagel shop down the street.

[20] *See, e.g.*, specification, page 3, lines 26-28.

[21] *See, e.g.*, specification, page 3, lines 29-31.

[22] *See, e.g.*, specification, page 3, line 31 to page 4, line 2.

VII. ARGUMENT

1. Discussion of Lemon

The Lemon reference discloses a system for issuing coupons at store kiosks.

Each of Lemon's kiosks is understood to include a CRT screen from which a user can select, and print, desired coupons. A credit card is passed through a mag stripe reader to identify the user to the kiosk. Certain coupon issuers may prescribe a one-per-customer-limit on certain coupons, so that if the same credit card is used at another kiosk, the user isn't presented the chance to obtain a coupon that he/she previously obtained.

2. Claim 2 (§ 102; § 103: Lemon + Official Notice)

Claim 2 is an independent claim, which reads as follows:

> *2. A method comprising:*
> *presenting a digitally watermarked object to a reader device at a first location, and triggering a first response thereby;*
> *presenting the object to a reader device at a second location, and triggering a second, different, response thereby;*
> *wherein at least one of said responses comprises the issuance of a coupon.*

The rejection is premised on a mistake of law. The Office asserts "*the digital watermark on the object does not play any role and is not given any patentable weight during examination.*"[23]

It is error for the Office to disregard claim limitations when assessing patentability of a claim.

(A fair reading of the claim makes clear that the claimed reader device reads the digitally watermarked object presented thereto. This was the "correction" that the Office earlier required, and refused entry when presented.)

Moreover, not only did the Final Rejection impermissibly disregard features expressed in the claim, it also "assumes" features *not* expressed in the claim:

> *"To this end, the Examiner assumes that the object has other marks such as a bar code imprinted thereon and that either location has a conventional reader capable of reading the bar code."*[24]

The Office's treatment of claim 2 brings to mind the quip of Justice Joseph Bradley in an 1861 opinion, "*Some persons seem to suppose that a claim in a patent is like a nose of wax, which may be turned and twisted in any direction . . . .*"[25]

Claim 2 reasonably conveys its subject matter to the artisan. It is error for the Office to turn and twist the claim in order to reject it.

Lemon does not teach the claimed method; the anticipation rejection should be reversed.

Claim 2 also stands rejected under § 103, in which the digital watermark on the object is said to be given patentable weight.[26]

In finally rejecting the claim, the Office relied on Official Notice of certain assertions about digital watermarks (paragraph bridging page 12-13). Since 2003 Appellants have been asking the Examiner to substantiate such asserted Official Notice so that the rejection could be fully addressed, and properly considered by the Board.[27] However, despite repeated requests, the Examiner did not do so.

It is error for the Examiner to refuse such repeated requests to substantiate asserted Official Notice. Such refusal hinders applicants in addressing rejections, and allows the Examiner to predicate rejections on his own unchecked view of the art.[28]

To justify modifying Lemon's teachings to yield the arrangement of claim 2, the Examiner proposed that same would have been obvious because the combination would be:

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23 January 31, 2005, Final Rejection, page 4.

24 *Ibid.*

25 *White v. Dunbar*, 119 U.S. 47, 51.

26 January 31, 2005, Final Rejection, page 9.

27 July 28, 2003, Amendment, pages 2-3; December 19, 2003, Response After Final, page 1; March 31, 2005, Amendment After Final., lines 11-12.

28 If the request to substantiate Official Notice is made for the first time during appeal, Appellants have a burden to show that the facts of which notice are taken are erroneous. No such burden is imposed on Appellants if the request is made prior to appeal; the burden is then on the Examiner to come forward with the requested showing.

> *"thereby adding an extra layer of security or protection to the coupon distribution and redemption system by completing eliminating the possibility that a malicious customer might duplicate a credit card (making credit card copies) and attempt to access a terminal T at a participating location to print one or more coupons associated with the credit card account for the digital watermark cannot be reproduced, while providing full control over the distribution and redemption of the coupons to the manufacturer who cannot be duped by unscrupulous customers using phony and unregistered credit cards..."*

Prima facie obviousness is not thereby established.

Combating fraud in coupon issuance due to unscrupulous customers using phony and unregistered credit card copies, is a problem that neither Lemon nor Appellants' invention contemplates or concerns. Rather, such rationale appears to be a hindsight attempt to justify modifying the art to conform to the claimed combination.

The art does not fairly suggest the claimed combination; the obviousness rejection of claim 2 should be reversed.

3. Claim 5 (§ 103: Lemon + Official Notice)

Claim 5 is an independent claim much like claim 2, but supplemented by the addition of clauses underlined below (and omitting the final limitation of claim 2):

> *5. A method comprising:*
> *presenting a digitally watermarked object to a reader device at a first location, decoding information from the watermark, and triggering a first response thereto; and*
> *presenting the object to a reader device at a second location, decoding information from the watermark, and triggering a second, different, response thereto.*

Because a fair reading of claim 2 makes clear that the "device" decodes information from the watermark, this claim 5 can be seen to be is a broader counterpart of claim 2. Thus, the rejection of claim 5 stands or falls with the obviousness rejection of claim 2.

For the reasons given above, the obviousness rejection did not meet the Office's burden, and should be reversed.

4. Claim 6 (§ 103: Lemon + Official Notice)

Claim 6 depends from claim 5, and is similarly allowable. The claim reads:

> *6. The method of claim 5 wherein at least one of said responses comprises the issuance of a coupon.*

Claim 6 – with its addition of "issuance of a coupon" to the arrangement of claim 5 – can be seen to define a method essentially commensurate with that of claim 2. Accordingly, the rejection of claim 6 stands or falls with the obviousness rejection of claim 2.

(Again, for the reasons given above, that obviousness rejection did not meet the Office's burden, so the rejection of claim 6 should be reversed.)

5. Claim 7

Claim 7 depends from claim 5 and is similarly allowable. Moreover, claim 7 is patentable independently. The claim reads:

> *7. The method of claim 5 wherein the digitally watermarked object comprises a coffee cup, or a jacket for a coffee cup.*

The Office dismisses this limitation, asserting that it "is a matter of choice." *However, it is not a choice presented by the art.*

Moreover, to support the rejection, the Examiner cites Appellants *own* specification:

> *Technically speaking, the watermark can be placed on any article of commerce or product (including a credit card) without affecting the functionality of the system. (This fact is supported by the specification.)*[29]

[29] January 31, 2005, Final Rejection, page 13, lines 7-9 (emphasis added).

It is improper for the Office to predicate a rejection based on the teachings of Appellants' own specification.

Again, the Office has fallen short of establishing *prima facie* obviousness; the rejection should be reversed.

VIII. CONCLUSION

None of the rejections meets the Office's burdens. Accordingly, the Board is requested to reverse the pending rejections, and remand for such further proceedings as may be required (e.g., making the restriction requirement Final so that the withdrawn claims can be canceled without prejudice).

Respectfully submitted,

Date: March 14, 2006

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CLAIMS APPENDIX

PENDING CLAIMS

1. (Canceled)

2. A method comprising:

presenting a digitally watermarked object to a reader device at a first location, and triggering a first response thereby;

presenting the object to a reader device at a second location, and triggering a second, different, response thereby;

wherein at least one of said responses comprises the issuance of a coupon.

3. (Withdrawn)

4. (Canceled)

5. A method comprising:

presenting a digitally watermarked object to a reader device at a first location, decoding information from the watermark, and triggering a first response thereto; and

presenting the object to a reader device at a second location, decoding information from the watermark, and triggering a second, different, response thereto.

6. The method of claim 5 wherein at least one of said responses comprises the issuance of a coupon.

7. The method of claim 5 wherein the digitally watermarked object comprises a coffee cup, or a jacket for a coffee cup.

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDIX

None